

Chicago Math and Science Initiative

Program Description

Rationale

- Future opportunities and challenges facing students require unprecedented skills in technology, critical thinking, and creative problem solving, as well as a solid foundation with basic skills in mathematics and basic conceptual understanding in science.
- For too many of our students, current levels of achievement in math and science are not adequate to take advantage of these opportunities and meet these challenges.
- A focus on mathematics and science helps children, helps Chicago, and helps CPS.

Basics

- Comprehensive plan for mathematics and science improvement
- \$14.5 million commitment next year
- Additional \$10 million for renovation of high school science laboratories
- 116 new positions for mathematics and science support
- Stronger partnerships with universities, national labs, and other providers to leverage additional funds, expertise, and resources
- Consolidation and alignment of programs
- Improved data analysis and program evaluation

Messages

- The CMSI complements the Reading Initiative and is a critical step in implementing the Education Plan.
- CMSI is a comprehensive program that will transform the way mathematics and science are taught and supported throughout the Chicago Public Schools - from the classroom, to the school, to the Instructional Areas, to the whole district - and thus transform our students' achievement in these essential subjects.
- CMSI includes better professional development, better support for students, teachers, and principals, better instructional materials, better assessment tools, laboratory facilities in our high schools, and better coordination in policies and programs across CPS.
- Approaches and materials employed in CMSI promote a careful balance between basic skills acquisition and development of conceptual understanding.
- CMSI includes extensive support for teachers and teacher teams, intensive programs for elementary schools, and a component for all high schools.

Goals In 5 years (end of 2007-2008 school year):

- Mathematics and science instruction in Chicago Public Schools will be improved, coherent, and well-supported.
- CPS students will perform significantly better on the math and science ISAT and PSAE tests and the gap in performance between the CPS and the state averages will be significantly narrowed.
- All math and science teachers will have, or be working towards, the appropriate certification requirements.
- The number of students who complete a high-school level algebra class in eighth grade will be increased dramatically.
- All high school science classes will be taught in fully renovated modern laboratory classrooms.
- The percentage of students taking and passing an AP course in a math or science subject with a score of 3 or higher will be increased dramatically.